



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/688,068

10/17/2003

John H. Dukesherer

5074A-000069

8134

27572 7590 05/04/2007
HARNESS, DICKY & PIERCE, P.L.C.
P.O. BOX 828
BLOOMFIELD HILLS, MI 48303

EXAMINER

RAMIREZ, JOHN FERNANDO

ART UNIT

PAPER NUMBER

3737

MAIL DATE

DELIVERY MODE

05/04/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/688,068

Applicant(s)

DUKESHERER ET AL.

Examiner

John F. Ramirez

Art Unit

3737

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02/12/07.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11-50 is/are pending in the application.
- 4a) Of the above claim(s) 3 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11-, 12-17, 19, 28-33, 38-43, 47-50 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date See Continuation Sheet.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date
:05/09/2005;11/9/2005;09/29/2006;08/16/2004.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 11, 13, 19, 20, 28, 32, 33, 39, 41, 42, 48, 49 and 50 are rejected under 35 U.S.C. 102(b) as being anticipated by Barrick et al. (US 2002/0087101). Barrick et al. discloses a device for generating a non-invasive dynamic frame of reference and tracking the position and orientation of a tool (abstract, paragraph 0074), including a body portion (422, see paragraph 0043) selectively attachable to a portion of the anatomy (see figures 1, 4 and 5); a navigation portion (430) to at least one of sense and transmit a characteristic (abstract); and a contoured holding section (410, 415) substantially non-invasively holds and contact the exterior body portion relative to the portion of the anatomy (see paragraphs 0052-0053, 0075), wherein the body portion and the holding portion are formed as a seamless uniform member, a fiducial marker is defined in the body portion, and the holding section operable to interact with a tool (see abstract and paragraph 0043).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 16, 17, 38 and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barrick et al. (US 2002/0087101).

Barrick et al. discloses fiducial markers and a fiber optic curvature sensor that can be affixed to a patient's skin, either adhesively or embedded in a garment, bandage, tape or other structure (paragraph 0043). The flexible curvature sensor may be in the form of a strip, tape, band or mesh that can be laid upon or wrapped about the patient in the area where surgery is to be performed (paragraph 0046). Barrick does not explicitly disclose a tensioning member to assist in holding the body portion relative to the anatomy. However, one of the means for mounting the body portion (422) on the patient is to be glued to the garment to be worn by the patient (see paragraph 0043). Therefore, the tensioning member limitation as claimed in claims 16, 17, 38 and 47 is merely a design where the functionality of the structure in question does not differentiate from Barrick's disclosure. Therefore, it would have been obvious to one having an ordinary skill in the art at the time the invention was made to apply the above design choice to Barrick's device derive the claimed invention.

Claims 29, 31, 40, and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barrick et al.

Barrick et al. substantially discloses all claimed features in claims 29, 40, and 43. However, Barrick et al. does not explicitly disclose a recess surface of the body portion that is complimentary in shape to the tracking device and is operable to receive the tracking device substantially within the volume. All these limitations are design choice or shape, a recess surface where the functionality of the tracking device does not differentiate from Barrick's disclosure. Therefore, it would have been obvious to one having an ordinary skill in the art at the time the invention was made to apply the above design choices to Barrick's device derive the claimed invention.

Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over Barrick et al. (US 2002/0087101) in view of Ferre et al. (US 5,800,352).

Barrick et al. teaches all the limitations of the claimed subject matter except for mentioning specifically a surgical navigation system wherein the navigation portion includes a coil of a conducting material; wherein said characteristic is an electromagnetic field. However, in the same field of endeavor, Ferre et al. teaches a registration system for use with monitoring the position of a medical instrument with respect to the patient's body having a coil of a conducting material for generating an electromagnetic position characteristic (see abstract, col. 4, lines 59-67, col. 5, lines 1-35, figure 23). Based on the above observations, for a person of ordinary skill in the art, enhancing a surgical navigation system with a coil conducting material for generating an

Art Unit: 3737

electromagnetic position characteristic would have been considered obvious in view of the proven conventionality of this enhancement.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John F. Ramirez whose telephone number is (571) 272-8685. The examiner can normally be reached on (Mon-Fri) 7:30 - 4:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian L. Casler can be reached on (571) 272-4956. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JFR


BRIAN L. CASLER
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3700